

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

To:

see form PCT/ISA/220

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2005/053667

International filing date (day/month/year)
27.07.2005

Priority date (day/month/year)
28.07.2004

International Patent Classification (IPC) or both national classification and IPC
A61K31/44, A61K31/4178, A61K31/4192, A01N43/647, A01N43/56, A01N43/74, A01N43/78, A01N43/40,

Applicant
AKZO NOBEL N.V.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

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**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/053667

Box No. 1 Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material:
 - ☐ a sequence listing
 - ☐ table(s) related to the sequence listing
 - b. format of material:
 - ☐ in written format
 - ☐ in computer readable form
 - c. time of filing/furnishing:
 - ☐ contained in the international application as filed.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.
PCT/EP2005/053667

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

The documents cited in the International Search Report are numbered D1-D3 in the order of their listing. Unless otherwise specified, reference is made to the passages cited in the search report.

1. A veterinary composition comprising a combination of an arylpyrazole and a nitroenamine for the control of parasitic insects and acarids is novel (Art. 33 (1) and (2) PCT), as it is not disclosed in the cited prior art.
2. The object of the present application is the provision of veterinary compositions against parasites with low toxicity, fast onset, low application rates and selective biological activity.
3. The solution proposed by the present application is the combination of arylpyrazoles of formula I with nitroenamines of formula II, in particular nitenpyram.
4. D1 discloses arylpyrazoles of formula I having insecticidal, acaricidal and animal endoparasitocidal activity.
5. D2 discloses the use of compounds of formula II, in particular nitenpyram and their use as insecticidal and/or miticidal agents.
D2 also suggests their combination with other insecticides (pyrethroid insecticides, organophosphorus insecticides, carbamate insecticides, natural insecticides, etc.), miticides (acaricides), etc. (p. 19, l.26).
6. D3 discloses veterinary preparations comprising combinations of the nitroenamine derivatives with benzoylurea derivatives and their usage in the systemic control of fleas on domestic animals, as well as the production and usage of such preparations and combinations.
D3 hereby solves the problem of the short duration of efficacy of nitroenamines (paragraph 55)
7. In light of documents D1-D3 the skilled person would consider combining nitroenamines

with other antiparasitic agents to overcome their short duration of efficacy and hereby project synergism.

Furthermore the combination of two known ingredients and their combined use for the same known purpose is considered to be a task that the expert in the field routinely accomplishes without the involvement of inventive activity.

The same applies for the provision of a kit comprising the combination of active ingredients.

8. Thus, the subject-matter of claims 1-10 cannot be considered inventive (Art. 33 (3) PCT).